

PHYSEOPARDY

Temp.
Scales

Fill in
The _____

Water

Heat
Transfer

Misc.

\$100

\$100

\$100

\$100

\$100

\$200

\$200

\$200

\$200

\$200

\$300

\$300

\$300

\$300

\$300

\$400

\$400

\$400

\$400

\$400

\$500

\$500

\$500

\$500

\$500

You have selected an area of the board not in play.

OOPS!

[Click here to go back to the main board](#)

Temperature Scales - *\$100*

True or False:

There are exactly 2 scales for measuring temperature.

ANSWER

Temperature Scales - \$200

What temperature is absolute zero?

ANSWER

Temperature Scales - \$300

What is a bigger change: A change of 1 degree Celsius or a change of 1 degree Fahrenheit?

ANSWER

Temperature Scales - \$400

What is average human body temperature? (Double the points if you have it in all three scales!)

ANSWER

Temperature Scales - \$500

What is a bigger change: A change of 1 degrees Celsius or a change of 1 Kelvin?

ANSWER

Fill in the _____ - \$100

Heat flows from _____ to
_____.

ANSWER

Fill in the _____ - \$200

Temperature is a measure of
_____ kinetic _____ .

ANSWER

Fill in the _____ - \$300

High “specific heat capacity” means it is _____ to change the temperature.

ANSWER

Fill in the _____ - \$400

The temperature at which all molecule
motion stops is called _____
_____ .

ANSWER

Fill in the _____ - \$500

Most substances _____ when
heated and _____ when cooled.

ANSWER

Water - \$100

1 L of water at 10 °C is mixed with 1 L of water at 30 °C. After the mixture reaches equilibrium, what will be its temperature?

ANSWER

Water - \$200

True or False:

Water has been put in a freezer set to -10°C ; long after it has turned to ice, the ice will still be 0°C because that is the freezing point of water.

ANSWER

Water - \$300

What is the boiling
temperature for water in
Celsius?

ANSWER

Water - \$400

In class, we trapped ice at the bottom of a test tube and got the top to boil in a flame. This shows that water is

- a. A good conductor
- b. Better at convection than conduction
- c. Both a. & b.
- d. Neither

ANSWER

Water - \$500

When equal amounts of hot water and cold zinc washers were combined, we saw that the washers warmed up a lot while the water cooled off just a little. This is because water has a very high:

- a. Thermal Expansion Rate
- b. Boiling Point
- c. Specific Heat Capacity
- d. None of these

ANSWER

Transferring Heat - \$100

The form of heat transfer where heated fluid rises and cooler fluid sinks:

- a. conDUction
- b. conVEction
- c. radiation

ANSWER

Transferring Heat - \$200

The form of heat transfer where particles in a substance bump into each other or heat is transferred between substances by contact:

- a. conDUction
- b. conVEction
- c. radiation

ANSWER

Transferring Heat - \$300

Hot air balloon rides are primarily an example of

- a. conDUction
- b. conVEction
- c. both
- d. neither

ANSWER

Transferring Heat - \$400

Energy transfer by convection generally happens in:

- a. Gases
- b. Liquids
- c. Solids
- d. Both A & B
- e. None of the above

ANSWER

Transferring Heat - \$500

Which of these is the **worst** conductor of heat?

- a. Steel
- b. Water
- c. Air
- d. Copper

ANSWER

Miscellaneous - \$100

Most matter (solid, liquid, gas) expands when heated and contracts when cooled. This is called:

- A. Specific Heat Capacity
- B. Boiling Point
- C. Thermal Expansion

ANSWER

Miscellaneous - \$200

Which contains more internal heat energy: a **bucket** of warm (50 deg C) or a **cup** of hot (100 deg C) water?

- a. cup
- b. bucket
- c. same

ANSWER

Miscellaneous - \$300

A catapult launches a projectile based on **stretching** something like rubber bands or **bending** wood. This means it uses _____ potential energy.

- a. Gravitational
- b. Chemical
- c. Elastic
- d. Kinetic
- e. None of these

ANSWER

Miscellaneous - \$400

A trebuchet launches a projectile based on **dropping** a weight from up **high**. This means it uses _____ potential energy.

- a. Gravitational
- b. Chemical
- c. Elastic
- d. Kinetic
- e. None of these

ANSWER

Miscellaneous - \$500

I hold a lit candle under 2 L of water and it goes up 10 degrees. I hold the same lit candle under 1 L for the same amount of time. How much does the temperature go up?

- a. 0 deg
- b. 5 deg
- c. 10 deg
- d. 20 deg

ANSWER

*****Answers*****

Temperature Scales - *\$100*

FALSE:

Celsius, Fahrenheit, Kelvin, or
invent your own!

DONE

Temperature Scales - \$200

0 Kelvin or -273°C or -460°F

DONE

Temperature Scales - \$300

1°C is bigger than 1°F

(It takes fewer “steps” to get from freezing to boiling in Celsius, so the steps must be bigger.)

DONE

Temperature Scales - \$400

98 °F

37 °C

310 K

DONE

Temperature Scales - \$500

They are the same size!

(Celsius and Kelvin have the same size “step”, they just have different places they call zero.)

DONE

Fill in the _____ - \$100

“hot”

“cold”

DONE

Fill in the _____ - \$200

“average”

“energy”

DONE

Fill in the _____ - \$300

“harder”

DONE

Fill in the _____ - \$400

“absolute zero”

DONE

Fill in the _____ - \$500

“expand”

“contract”

DONE

Water - *\$100*

Equal parts of each so it
should meet in the
middle:

20 degrees C

DONE

Water - \$200

FALSE:

Solid ice can be any temperature less than 0°C and it will reach equilibrium with the freezer.

DONE

Water - \$300

Water boils at 100°C

DONE

Water - \$400

In class, we trapped ice at the bottom of a test tube and got the top to boil in a flame. This shows that water is

- a. A good conductor
- b. Better at convection than conduction**
- c. Both a. & b.
- d. Neither

DONE

Water - \$500

We saw that when equal amounts of hot water and cold zinc washers, we saw that the washers warmed up a lot while the water cooled off just a little. This is because water has a very high:

- a. Thermal Expansion Rate
- b. Boiling Point
- c. Specific Heat Capacity**
- d. None of these

DONE

Transferring Heat - \$100

The form of heat transfer where heated fluid rises and cooler fluid sinks:

- a. conDUction
- b. conVEction**
- c. radiation

DONE

Transferring Heat - \$200

The form of heat transfer where particles in a substance bump into each other or heat is transferred between substances by contact:

- a. **conDUction**
- b. conVEction
- c. radiation

DONE

Transferring Heat - \$300

Hot air balloon rides are primarily an example of

- a. conDUction
- b. conVEction**
- c. both
- d. neither

DONE

Transferring Heat - \$400

Energy transfer by convection generally happens in:

- a. Gases
- b. Liquids
- c. Solids
- d. Both A & B**
- e. None of the above

DONE

Transferring Heat - \$500

Which of these is the **worst** conductor of heat?

- a. Steel
- b. Water
- c. Air**
- d. Copper

DONE

Miscellaneous - \$100

Most matter (solid, liquid, gas) expands when heated and contracts when cooled. This is called:

- A. Specific Heat Capacity
- B. Boiling Point
- C. Thermal Expansion**

DONE

Miscellaneous - \$200

Which contains more internal heat energy: a **bucket** of warm (50 deg C) or a **cup** of hot (100 deg C) water?

- a. cup
- b. bucket**
- c. same

DONE

Miscellaneous - \$300

A catapult launches a projectile based on **stretching** something like rubber bands or **bending** wood. This means it uses _____ potential energy.

- a. Gravitational
- b. Chemical
- c. Elastic**
- d. Kinetic
- e. None of these

DONE

Miscellaneous - \$400

A trebuchet launches a projectile based on **dropping** a weight from up **high**. This means it uses _____ potential energy.

- a. **Gravitational**
- b. Chemical
- c. Elastic
- d. Kinetic
- e. None of these

DONE

Miscellaneous - \$500

I hold a lit candle under 2 L of water and it goes up 10 degrees. I hold the same lit candle under 1 L for the same amount of time. How much does the temperature go up?

- a. 0 deg
- b. 5 deg
- c. 10 deg
- d. 20 deg**

DONE

Directions for Changing the Game

- To change the questions and answers, just type over the problems...Use the “replace” feature to change the categories easily
- The daily doubles were originally set to category #4 for \$500 and category #2 for \$300
- To change the daily doubles you must
 - 1. Change the hyperlink for the links on the main board to go to the appropriate question, therefore bypassing the daily double slide
 - 2. Change the hyperlink on the continue button on each daily double slide to go to the new question.